The Management of SUICIDALITY: *Assessment and Intervention*

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ABSTRACT:
A potentially suicidal patient is among the most difficult challenges faced by healthcare providers. This article reviews rates of suicide in America among the population as a whole and subpopulations based on age and race. In 2003, nearly 11 Americans out of every 100,000 killed themselves. The rates of suicide were highest among whites, Native Americans, and elderly males. Suicide rates are elevated among many common mental illnesses, including major depression, bipolar disorder, schizophrenia, and alcoholism. Although statistical risk factors are significant, they are of limited help in determining what should be done with specific patients. Documenting demographic information, checking off diagnostic criteria, and asking patients if they have thoughts of killing themselves are only the start of the evaluation of suicidality. The complete assessment of suicidality requires inquiring into static and dynamic risks factors, warning signs and psychosocial stresses. Patients who report suicide plans should be asked about the plan in detail, including the chance of rescue, preparations for, and rehearsal of the suicide attempt. Interventions to reduce the risk of suicide should then be targeted towards eliminating or minimizing these various factors. Despite our best efforts patients will occasionally kill themselves. Studies have found that a majority of experienced psychiatrists have had a patient commit suicide. Following the suicide of a patient, clinicians will often experience a professional as well as personal response. Most providers who have experienced a patient suicide find talking to co-workers, peers, and friends to be useful.

INTRODUCTION

Keeping up with the literature on suicide and suicide assessment is a forlorn hope. Hundreds of articles and numerous books are published each year on various aspects of suicidology. Entire journals are dedicated to the topic. The busy clinician might understandably feel overwhelmed by this glut of information and fall back on doing things the way he or she has always done them. While this article cannot hope to encompass all that has been written and all that is known about suicide, it will try to give the provider a comprehensive overview of conducting and documenting a sufficient suicide assessment.

As the potential for increased suicidality seems to be spread across a broad array of psychiatric illnesses, the conscientious provider needs to be aware of much more than just the patient's diagnosis.

RATES OF SUICIDE

Rates of suicide worldwide. Worldwide statistics about suicide are often unreliable, depending largely on the state of forensic science in the country and the government's willingness to publish this information. A survey of suicide rates in the 1990s found that 53 percent of the nations in the world do not publish data on suicide within their countries. This lack was most prominent in the poorest nations, where only one of 34 nations published the data. For the 32 reporting nations classified in the medium socioeconomic group, the rate of suicide in men in the 1990s was 15.4 per 100,000 per year, while in women it was 11.7 per 100,000 per year. For the 49 reporting countries in the highest socioeconomic status, the rate of suicide in men was 19.3 per 100,000 per year, while in women it was 5.9 per 100,000 per year. The reported range of suicide rates varied widely from 0.2 per 100,000 per year in Iran to 41.7 per 100,000 per year in the Russian Federation.[1]

Rates of suicide in this country are officially tabulated by the Centers for Disease Control and are readily available online through the National Center for Health Statistics. The latest year for which an overall rate has been published is 2003 when suicide was the 11th leading cause of death and was responsible for 1.3 percent of all deaths in the US. In 2003, there were 31,484 suicides in the US, which had an overall suicide rate of 10.8 per 100,000 per year. This represented a 0.9-percent decrease from 2002. There were large variations in the rates of suicide among different subpopulations of Americans. The ratio of male to female suicides was 4.3:1. Suicide was two times more common in white, non-Hispanic Americans than it was in Black or Hispanic Americans.[2]

The rate of suicide among Americans varies considerably across age ranges as well. Suicides among those under age 15 are quite rare. The official rate of suicide between ages 5 to 14 is only 0.6 per 100,000 per year. During adolescence and early adulthood (ages 15–24) the rate jumps to 9.7 per 100,000 per year. It steadily increases to a rate of 15.9 per 100,000 per year in those aged 49 to 54. It dips for the next 20 years, but then rises again in those over 75. Americans over the age of 85 actually have the highest rate of suicide, 16.9 per 100,000 per year.[2]

Rates of suicide in select mental illness. *Schizophrenia.* Researchers have reported that the rate of the suicide in patients with schizophrenia is 4 to 9 percent; a review of 29 mortality studies found a lifetime risk of suicide of four percent.[3] Suicide in individuals with schizophrenia usually occurs relatively early in the course of the illness.[4,5] A prospective study of over 4,000 patients admitted for schizophrenia and followed for 1 to 16 years found that 1.8 percent killed themselves during that time. Of those who committed suicide, slightly over one half did so within four years of their index admissions. Individuals with schizophrenia were more likely to commit suicide if they had significant depressive symptoms in their residual phases, had greater intensity of suicidality, and had a later onset of schizophrenia.[6] Traditionally, suicide in patients with schizophrenia has also been linked to the presence of command hallucinations, which have ordered the patients to kill themselves. Although this is a logical assumption, there is limited data supporting it.[7] Other risk factors for suicide in patients with schizophrenia include white race, substance abuse, previous suicide attempts, poor adherence to treatment, and experiences of agitation, depression, or a sense of worthlessness. There is also support for the belief that developing schizophrenia after having had some degree of academic achievement is associated with higher rates of suicide.[7]

Major depression. Many physicians have been taught that the rate of suicide in patients with major depressive disorder (MDD) is 15 percent. This rate was based largely on inpatient studies. Studies that have followed outpatients with MDD have found lifetime suicide rates of 2 to 10 percent.[8,9] The suicide rate for patients with depression increases within the first year of the illness

and shortly after discharge from an inpatient psychiatric unit.[8] The combination of depression with alcohol abuse raises this already high risk as much as 5 to 10 times.[10] Men with depression who have a history of impulsive and aggressive personality styles also seem to be at elevated risk.[11] Because of the connection between depression and suicide, researchers attempted to distinguish risk factors that convey a short-term risk of suicide from those with a long-term risk of suicide. One such study followed 954 patients for 10 years. During this period, there were 32 suicides. An analysis of those suicides found two groupings of risk factors. One set of risk factors was associated with an increased risk of suicide in the following year (13 suicides), while long-term risk factors were those associated with an increased risk of suicide over the ensuing 2 to 10 years (19 suicides). The short-term risk factors include psychic anxiety, panic attacks, loss of pleasure and interest in activities, alcohol abuse, decreased concentration, indecisiveness, and insomnia.[12] The long-term risk factor, include suicidal ideation, suicidal intent, hopelessness, prior suicide attempts, decreased concentration, and indecisiveness.[12]

Bipolar disorder. Patients with a bipolar disorder have a significant rate of suicide. A meta-analysis of 30 studies involving patients with bipolar disorder found that 19 percent of patients with manic depression died of suicide.[13] Smaller, long-term individual studies have found rates as low as 1.2 to 8 percent.[8] Patients with bipolar disorder who are at highest risk for suicide are males, those who have previously attempted suicide, and those who expressed hopelessness.[14] Providers need to remain aware that the risk of suicide is just as real in patients with bipolar disorder type II as it is with bipolar disorder type I. Studies have looked at individuals who were experiencing a major depressive episode at the time of their suicides. Researchers determined that 36 to 46 percent of them had diagnosable bipolar type II disorders at the time of their deaths.[15] Patients with bipolar disorder are more likely to make serious suicide attempts than the general public. Whereas the ratio of attempts to completed suicide in the general population may be as high as 30 to 1, in patients with a bipolar disorder it is only 4 to 1.[16]

Substance abuse/dependence. Substance use disorders, especially alcoholism, are also associated with increased rates of suicide. The suicide rate in alcohol dependence seems to be approximately seven percent.[3] Abuse and dependence increase the long-term risk of suicide, but intoxication further increases the immediate risk by creating emotional instability, disinhibition, and poor cognitive and executive functioning.

Personality disorders. Personality disorders have been looked at in a number of recent posthumous studies. In these retrospective studies, 29 to 62 percent of suicides had potentially diagnosable personality disorders at the time of the individuals' deaths.[17–19]

> One approach [of reliably assessing a patient's risk for suicide]...advises differentiating factors into **RISK FACTORS** and **WARNING SIGNS**.

RISK ASSESSMENT STRATEGIES

The most common lawsuit against psychiatrists involves the suicide of a patient.[20] This occurs despite the longstanding contention that psychiatrists cannot accurately predict which patients will eventually commit suicide.[21–23] Even though the law appreciates that providers cannot predict with absolute certainty who will or will not commit suicide, it still holds providers responsible for conducting and documenting a reasonable suicide assessment and then acting in accordance with that assessment. This principle centers on the concept of a suicide being foreseeable. The term *foreseeable* indicates a common sense, probabilistic notion that a reasonable provider would appreciate that harm was a likely result from a particular action they have taken or neglected to take.[24]

As the potential for increased suicidality seems to be spread across a broad array of psychiatric illnesses, the conscientious provider needs to be aware of much more than just the patient's diagnosis. The most commonly utilized strategy is to simply ask patients whether they have had thoughts of killing themselves. Although this is useful, one cannot stop there. It is estimated that 13.5 percent of the American population will have suicidal ideation at some point in their lives. Of those with a history of suicidal ideation, less than one percent will kill themselves. The challenge for the provider is to identify which of the 10 percent of individuals with suicidal ideation and suicide plans will ultimately commit suicide.[20]

There are several schemes for evaluating an individual patient's potential for suicide. Most of these involve dividing well documented risk factors into various categories. One such schema separates the risk factors into static and dynamic risk factors. Static risk factors would be variables that the provider would be unable to change, while dynamic factors can be modified in some way. Into the static category go

gender, race, age, personal history of suicide attempt, and family history of suicide. The static factors are based on the actuarial facts of who commits suicide. It is important that the provider remember, for instance, that the suicide rate in men over 85 years of age may be as high as 60 per 100,000 per year and that the suicide attempt to completed suicide ratio is lower in elderly men than for any other age group.[25] Another static risk factor for suicide is a history of a suicide attempt.[26] The problem with using these factors is their stability; once someone has attempted suicide, this risk factor will be positive every day for the rest of their lives. It does correctly denote that this person is at higher risk than the general population, but it does not help the provider make decisions regarding the patient sitting in his or her office on a particular day. Dynamic, or modifiable, factors include mental health diagnoses, emotional turmoil, substance use or abuse, and suicidality. Considering the dynamic risk factors in light of the static risk factors will more finely focus the clinician's assessment and will help shape the interventions.

Having a test or instrument that reliably assesses a patient's risk for suicide would be useful, but the search for this has, to date, been unfruitful. One effort is to combine known risk factors and use combinations of them to develop a tool that could predict suicide or at least objectively determine the level of risk. These efforts focus on demographic information, such as age, gender, and race. In one study, 1,006 patients admitted with a diagnosis of mood disorder (including schizoaffective disorder) were followed for 2 to 13 years.[27] Forty-six of those individuals committed suicide during the course of the study. Using stepwise logistical regression, researchers determined the factors that were most predictive of those who committed suicide. Those factors included gender, number of prior suicide attempts, suicidal ideation on admission, bipolar disorder, unipolar depression with a family history of bipolar disorder, and outcome at discharge. Combining these into a single instrument, however, predicted none of the 46 suicides that occurred in their population.[27] Another study followed 785 patients with MDD for up to 21 years. In this group, there were 33 suicides. The most robust predictor of suicide was item number 246 on the Schedule for Affective Disorders and Schizophrenia (SADS). This item includes a seven-point scale that rates suicidality from absent to extreme. Of those who committed suicide, 39 percent had been assessed at a 6 or 7. But that still means that 60 percent of the 33 eventual suicides would have been missed if the researchers had used a cut-off score of 6.[28] Without a reliable, objective assessment tool available, providers are forced to utilize other strategies.

RISK FACTORS are empirically derived and imply an enduring risk. These are often static and have limited implications for interventions.

RISK FACTORS, WARNING SIGNS, AND PSYCHOSOCIAL STRESSORS

One approach advanced by the American Association of Suicidology Working Group advises differentiating factors into risk factors and warning signs. Risk factors are empirically derived and imply an enduring risk. These are often static and have limited implications for interventions. On the other hand, warning signs are more proximal in nature and are based on clinical assessments. They tend to imply a more imminent risk and are, therefore, more likely to be the target of immediate intervention.[29]

A third category that could be included are psychosocial stressors. These are external pressures or changes in life circumstances that often occur shortly before a suicide attempt. Often these stressors represent the "last straw" for an individual who is already struggling with other risk factors and warning signs.

Static risk factors. *Male.* The ratio of male to female suicides in this country is currently above 4 to 1. This seems to be a fairly stable finding in Western European culture. A survey of reported suicides from England and France in the 18th century found a ratio of 2.7 to 1. Going back to 54 suicides reported from French villages in the Middle Ages found a ratio of approximately 3 to 1.[30]

Being single. This includes individuals who are widowed, divorced, and those who have never been married. This risk factor has not been demonstrated in all studies looking at the issue.[28]

Age. Increasing age is generally associated with increasing risk for suicide. This relationship seems to persist even when there is no accompanying mental illness. A study of elderly suicide patients who were without a mental illness based on a psychological autopsy found that only 13 percent had significant psychiatric symptoms and 43.5 percent had abnormal personality traits. The most common life stresses in this population were medical illness and recent bereavement.[31]

Race. White and Native Americans have higher suicide

rates than do Black and Hispanic Americans.[32]

Prior suicide attempts. A past suicide attempt is one of the most robust risk factors for future suicide. Studies have found that up to half of suicides have deliberately harmed themselves prior to their suicides. That percentage rises to two-thirds when you examine suicide in younger people.[33] As many as 10 to 15 percent of individuals who have attempted suicide will ultimately succeed in killing themselves.[26] A study of 100 suicide attempters followed for 37 years found that 13-percent ended their own lives. Of the female suicide attempters, the rate of completed suicide was eight percent. For men, the rate of completed suicide was 26 percent. The eventual suicide was quite often far removed in time from the index suicide attempt. Two-thirds of the suicides occurred 15 or more years after the index attempt.[26]

Family history of suicide. In a controlled matched study of suicides in Taiwan, having suicidal behavior in the family increased odds ratio of suicide 4.2 times.[17]

Dynamic risk factors. *Mental illness*. We already have discussed the increased rates of suicide among those with mental illness and substance abuse. These mental illnesses should be identified and treated aggressively using evidence-based treatments and algorithms when possible.

Emotional turmoil. As a part of or independent from mental illness, most individuals contemplating suicide will have considerable emotional distress. This can include symptoms of depression, anxiety, panic attacks, anhedonia, hopelessness, decreased concentration, and insomnia. These should be identified and treated aggressively with psychopharmacologic or psychotherapeutic interventions.[24]

Suicidality. Assessing suicidality is an intricate procedure that involves much more than simply asking if patients have recently had thoughts of killing themselves. Assessing suicidality involves recording spontaneous expressions and asking the proper questions. Many patients do relay information about their suicidal ideation and intent. As many as half of suicide patients will inform their spouses or another close relative of their suicide intent.[20] A review of 468 suicides over four years in a metropolitan area found that 38 percent of those committing suicide had either written a suicide note or had informed others of their intent.[34] Many individuals who kill themselves will have contact with a healthcare provider within days to weeks of their suicide. A review of 40 studies found that approximately 19 percent of individuals who commit suicide have contact with a mental health provider within a month of their deaths.[35] Nearly one in three have contact within a year, and over half have had contact with a mental health provider at some point in their lives. Almost half (45%) of individuals who committed suicide had contact with a primary care provider within a month of their suicides.[35] There were 1,397 documented suicides in Finland during a one-year period from 1987 to 1988. Of those suicides, 571 (41%) had contact with a healthcare provider within 28 days of their deaths. Almost half of those individuals had contact with their healthcare providers within the week prior to their deaths and 100 of the 571 met with their healthcare providers on the day of their deaths. Of those appointments where the cause of the appointment was known, 50 percent were for psychological or psychosocial reasons.[36] Studies looking at communication of suicidal intent to providers have found that a small but important minority of patients do inform their providers. In the study of 60 Wisconsin suicides, 18 percent had relayed their suicidal intent to healthcare providers.[20] Of the suicides in Finland from 1987 to 1988, slightly over one in five of those individuals told their healthcare providers of their suicidal intent.[36] Most suicide patients, however, do not disclose their true suicidality. A prospective study of patients who killed themselves within six months of a thorough mental health evaluation found that more than half denied any suicidal ideation or reported, at most, vague suicidal ideation.[37]

There are many reasons why individuals may not relate their true suicidal intents to their providers. Sometimes the denial will be based on a deliberate attempt to deceive the provider or will be the result of a deficient therapeutic alliance. In this situation, the patient does not trust the clinician or is not engaged in therapy enough to be completely honest. The patient's denial might also represent an empathic failure on the part of a provider who does not pick up on more subtle cues. In

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other cases, the patient may be alexithymic and not consciously able to express emotional distress. In some instances, the interview with the therapist might temporarily diminish the patient's distress to the point where suicidal intent resolves. After the patient leaves the confines of the office, however, the feelings return. Finally, it is a clinical reality that suicidal intent changes over time. Patients can become suicidal over a short period of time or can have their suicidality suddenly resolve.[20] Of 515 individuals restrained from jumping off of the Golden Gate Bridge, 94 percent were still alive 26 years later.[21]

Once the therapist has developed as much of a trusting relationship as possible, there are several separate aspects of suicidality that should be addressed. Major topics would include suicidal ideation, suicide intent, and suicide plans. Suicide plans can be further divided into plans, preparation, and rehearsals.[38] Most of these terms are familiar to the provider and can be assessed in a straightforward manner. Suicidal ideation simply involves having thoughts of killing yourself. Suicide intent includes a desire for death, reasons for dying, and an absence of reasons for living. These factors can be demonstrated by spontaneous comments, direct questioning, written statements, or passive suicide attempts, such as not taking care of themselves.[38]

Suicide plans should be assessed by rating the relative lethality of the plan and the risk of discovery or rescue. In addition, the patient should be assessed to see if he or she has made preparation for the suicide attempt. Preparations could include purchasing a weapon, stockpiling medications, or searching for buildings with access to the roof. Rehearsals could include loading the gun, holding the empty gun to the head, counting pills, climbing onto the roof, or reading material on suicide attempts. Additionally patients can be assessed for a desire to build up courage or competence for a suicide attempt.[38]

Other. Additional risk factors that are commonly cited include access to a firearm, a family history of suicide, poor social support, significant medical problems, a history of abuse and a significant adverse life event, and impulsivity.[20,38]

Protective factors. Protective factors include the absence of risk factors, a history of self-control, cultural or religious beliefs that mitigate against suicide, and fears of harming or letting down family members.[32,38]

Warning signs. The American Association of Suicidology Working Group divided suicide warning signs into two echelons of concern. The less concerning warning signs include hopelessness; rage, anger, and seeking revenge; acting recklessly or engaging in risky behavior; feeling trapped; increasing alcohol or drug use; withdrawing from friends, family, and society; anxiety and agitation; insomnia or hypersomnia; dramatic changes in mood; and no reason for living or no purpose in life.

The more concerning warning signs include direct threats to harm or kill themselves; actively looking for ways to kill themselves; and talking or writing about death, dying, or suicide.[29]

Evaluating **RISK FACTORS, WARNING SIGNS, AND PSYCHOSOCIAL STRESSORS** gives the clinician a framework for the suicide risk assessment. Providers can quickly create a template for suicide assessment that would help them ensure that they have covered and documented these major areas.

PSYCHOSOCIAL STRESSES

Studies have also tried to elicit the precipitant to suicide, the event that occurs immediately before the suicide attempt. One difficulty is that there is almost no end to the reasons why people might try to kill themselves. Unrequited love, financial ruin, shame, fear of punishment, and fear of psychological pain have all been motivating factors. The studies try to sort through these myriad of possibilities to find the most likely culprits. Of 468 suicides over a four-year period in Indianapolis, the precipitant varied with the age of the individual. For those between ages 10 to 24, the most common experiences were relationship problems (47.2%) and legal problems (23.6%). These were the most common stressors in those aged 25 to 64 as well. In the older populations, however, the majority (62%) of suicides were precipitated by declining health or physical illness.[34] Psychological autopsies on 100 individuals over the age of 60 who committed suicide found similar results. In those cases, physical illness was felt to be a contributory factor to the suicide in 62 percent of the cases. Interpersonal problems and bereavement were each felt to be contributory in less than a third of the cases.[39] The United States Air Force, in an effort to minimize suicides among its members, has

looked at the precipitants of suicide. In a study from 1983 to 1993, 76 percent of suicides had relationship problems, 46 percent had work-related problems, 23 percent had financial problems, 16 percent had legal problems, and most (60%) had multiple problems.[40] Past studies have found a number of factors that are frequently associated with suicide, including living alone, marital disruption, unemployment, lower socio-economic status, and recent migration.[17] A study of 113 suicides in Taiwan found that living alone increased the odds ratio of suicide four times compared to matched controls. Other factors that significantly elevated the risk included being unemployed, unmarried, being a nonskilled worker, recent immigration, and loss of health, significant person, cherished idea, or material possession.[17]

DOCUMENTING THE SUICIDE RISK ASSESSMENT

Evaluating risk factors, warning signs, and psychosocial stressors gives the clinician a framework for the suicide risk assessment. Providers can quickly create a template for suicide assessment that would help them ensure that they have covered and documented these major areas. Often these areas are either neglected during the interview or are asked but not recorded. A review of suicides in Wisconsin during 1996 found that 83 percent of the suicides were considered to be either unavoidable or unexpected. An unavoidable suicide was one where a significant suicide risk was documented and appropriate steps were taken, but the patient killed himself anyway (27%). An unexpected suicide was one in which the suicide risk assessment was performed but revealed no increase in suicide risk (56%). In 17 percent of the suicides, however, there was no assessment of suicide.[20] Developing a structured suicide risk assessment can help prevent providers from being overly confident in their interviewing skills or overly frightened of the possibility of suicide and talking to their patients about nothing but suicide. This structured suicide assessment would include demographic or static factors that can be obtained on checklists completed by the patient as well as information obtained during the clinical interview. Although many patients may deliberately deceive their providers regarding their intentions, others have enough ambivalence that they will share information with providers they trust.

INTERVENTIONS

The provider's interventions will be attempts to ensure safety and alter the risk factors, warning signs, and psychosocial stressors.

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Hospitalization is the safest course for those judged to be at imminent risk for suicide. Hospitalization on a psychiatric unit does not eliminate the potential for suicide, but it is the safest environment we can provide. For those not requiring hospitalization, partial hospitalizations and intensive outpatient programs can be considered. Providers can be particularly challenged by patients with chronic suicidality, especially those with a borderline personality disorder. While those patients may require hospitalization for brief psychotic episodes and following life-threatening suicide attempts, hospitalization may not be the best course for those making suicide threats or those who have engaged in minor overdoses or self-mutilation. Hospitalization under those circumstances can lead to dramatic regressions and worsening of behavior. In patients with borderline personality disorder and chronic suicidality, partial hospitalizations may be preferable to admission.[50]

> Hospitalization may not be the best course for [borderline personality disorder patients] making suicide threats or those who have engaged in minor overdoses or self-mutilation...partial hospitalizations [in these patients] may be preferable to admission.

For patients returning home from the hospital, which is a time of elevated suicide risk, and for those patients who were never hospitalized, the provider can undertake a number of interventions to improve the safety of that environment. Providers

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should make every effort, with the patient's permission, to engage existing support systems. Sources of support can include spouses, friends, clergy, and other healthcare providers. Frequent recommendations include removing potentially lethal items, such as firearms and potentially lethal medications. If a family member or friend is being asked to watch the patient in lieu of hospitalization, then they should be informed of the potential risk of suicide. The provider can help the family and friends develop a plan of action if they believe the patient is becoming more suicidal.

The provider will want to intervene to minimize the impact of risk factors. Since most individuals who commit suicide have depressive symptoms, treating a patient's depression through psychotherapy and/or medications should be a top priority. Although there is no clear evidence that use of antidepressants directly decreases rates of suicide, they do effectively treat depression and might therefore indirectly lower rates of suicide.[41] Other mental illnesses, such as schizophrenia, anxiety disorders, and substance abuse, and symptoms such as insomnia should also be treated vigorously with medication and psychotherapy. The psychotherapy will often focus on immediate, short-term goals, such as improving coping strategies, challenging negative cognitive schemas, and emphasizing behavioral control or activation, depending on the circumstances.

Another common strategy is the development of a crisis plan. This is a detailed list of steps for the patient to follow when he or she is suicidal.[38] Instructions can include pharmacological interventions, behavioral steps to increase a sense of control, contacting family and friends, and when and how to contact the provider. The final step in the crisis care plan is often when to report immediately to the local emergency department. Giving the patient a written algorithm to follow during times of increased distress will help increase the options they have available.

Unfortunately, no amount of diligence on the part of the provider will take away another individual's ability to choose to commit suicide.

The best we can do is ensure that we have adequately assessed the individual who is coming to us for help and have offered them appropriate treatment and interventions.

PREPARING FOR THE AFTERMATH OF SUICIDE

Despite all of our efforts, some patients will commit suicide. Individuals will sometimes decide that they would rather be dead than face the pain of continuing to live. As Edwin Schneidman said in 1984, "The central issue in suicide is not death or killing; it is, rather, the stopping of the consciousness of unbearable pain, which unfortunately by its very nature entails the stopping of life...If the pain were relieved, then the individual would be willing to continue to live."[42] The unbearable pain, however, can come from a wide variety of sources that providers are unable to prevent. Because of this, all clinicians, especially those who work with patients with mental illness, need to prepare themselves for the possibility of suicide among their patients. There is limited data available for estimating the number of patients seeking mental healthcare who will eventually commit suicide. Surveys from 1988 found that 22 percent of psychologists[43] and 51 percent of psychiatrists[44] had experienced a patient suicide. A study of Scottish psychiatric consultants found that 67 percent of them had experienced a patient suicide.[45] A survey of mental health providers in the Menninger clinic found that 39 percent of them had a patient commit suicide.[46] Finally, a survey of relatively junior mental health

providers serving in the United States Air Force found that nearly one half had a patient commit suicide.[47]

Although the data looking at the consequences of a patient suicide is mostly from mental health providers, the impact on other specialists is likely to be similar. Most providers who had a patient commit suicide experienced both a professional and personal impact.[48] The professional impact tends to take the form of a re-evaluation of his or her care of the particular patient and patients in general. Many providers will report a change in the way they manage suicidal patients and the way they document the care that they provide. They tend to document their interactions more extensively and conservatively.[45,46] The personal impact of a patient's suicide often starts with a period of astonishment or disbelief. This is followed by a wide variety of responses, including anger, shame, guilt, and grief.[49]

The most effective response to this unforeseen death is talking about it. While providers may have limits on discussing the details of the case, it is still useful to find trusted friends and coworkers with whom you can talk. The majority of mental health providers who discussed a suicide case with colleagues and/or friends found those discussions to be "helpful" or "very helpful."[45,47]

Unfortunately no amount of diligence on the part of the provider will take away another individual's ability to choose to commit suicide. The best we can do is to ensure that we have adequately assessed the individual who is coming to us for help and have offered them appropriate treatment and interventions. While this will not deter the individual who is determined to end his or her life, our thoroughness and display of concern will hopefully identify individuals who possess ambivalence about their desire for life and will allow us to intervene effectively.

REFERENCES

1. Vijayakuma L, Nagaraj K, Pirkis J, Whiteford H. Suicide in developing countries: Frequency, distribution, and association with socioeconomic factors. *Crisis* 2005;26:104–11.
2. Hoyert DL, Heron MO, Murphy SL, Kung HC. Deaths: Final data for 2003. *National Vital Statistics Reports* 2006;54. Available at: www.cdc.gov/nchs/data/nvsr/nvsr54/nvsr54_13.pdf. Access date: December 16, 2006
3. Inskip HM, Harris EC, Barraclough B. Life time risk of suicide for affective disorder, alcoholism, and schizophrenia. *Br J Psychiatry* 1998;172:35–7.
4. Palmer BA, Pankratz VS, Bostwick JM. The lifetime rate of suicide in schizophrenia. *Arch Gen Psychiatry* 2005;62:247–53.
5. Radomsky ED, Haas GL, Mann JJ, Sweeney JA. Suicidal behavior in patients with schizophrenia and other psychotic disorders. *Am J Psychiatry* 1999;156:1590–5.
6. Kuo CJ, Tsai SY, Lo CH, et al. Risk factors for completed suicide in schizophrenia. *J Clin Psychiatry* 2005;66:579–85.
7. Hawton K, Sutton L, Haw C, et al. Schizophrenia and suicide: A systematic review of risk factors. *Br J Psychiatry* 2005;187:9–20.
8. Angst J, Angst F, Stassen HH. Suicide risk in patients with major depressive disorder. *J Clin Psychiatry* 1999;60(Suppl 2):57–62.
9. Nierenberg AA, Gray SM, Grandin LD. Mood disorders and suicide. *J Clin Psychiatry* 2001;62(Suppl 25):27–30.
10. Goldberg JF, Singer TM,Garno JL. Suicidality and substance abuse in affective disorders. *J Clin Psychiatry* 2001;62(Suppl 25):35–43.
11. Dumais A, Lesage AD, Lada M, et al. Risk factors for suicide completion in major depression: A case-control study of impulsive and aggressive behaviors in men. *Am J Psychiatry* 2005;162:2116–24.
12. Fawcett J, Scheftner WA, Fogg L, et al. Time-related predictors of suicide in major affective disorder. *Am J Psychiatry* 1990;147:1189–94.
13. Simpson SG, Jamison KR. The risk of suicide in patients with bipolar disorders. *J Clin Psychiatry* 1999;60(Suppl 2):53–6.
14. Hawton K, Sutton L, Haw C, et al. Suicide and attempted suicide in bipolar disorder: A systematic review of risk factors. *J Clin Psychiatry* 2005;66:693–704.
15. Rihmer Z, Pestality P. Bipolar II disorder and suicidal behavior. *Psychiatr Clin N Am* 1999;22:667–73.
16. Baldessarini RJ, Pompili, Tondo L. Suicide in bipolar disorder: Risks and management. *CNS Spectr* 2006;11:465–71.
17. Cheng ATA, Chen THH, Chen CC, Jenkins R. Psychosocial and psychiatric risk factors for suicide: Case-control psychological autopsy study. *Br J Psychiatry* 2000;177:360–5.
18. Foster T, Gillespie K, McClelland R. Mental disorder and suicide in northern Ireland. *Br J Psychiatry* 1997;170:447–52.
19. Isometsa ET, Henriksson MM, Heikkinen ME, et al. Suicide among subjects with personality disorders. *Am J Psychiatry* 1996;153:667–73.
20. Mays D. Structured sssessment methods may improve suicide prediction. *Psychiatr Ann* 2004;34:367–72.
21. Simon RI. Imminent suicide: The illusion of short-term prediction. *Suicide Life Threat Behav* 2006;36:296–301.
22. Hughes DH. Can the clinician predict suicide? *Psychiatr Serv* 1995;46:449–51.
23. Pokorny AD. Prediction of suicide in psychiatric patients. *Arch Gen Psychiatry* 1983;40:249–57.
24. Simon RI. Psychiatrists awake! Suicide risk assessments are all about a good night's sleep. *Psychiatr Ann* 1998;28:479–85.
25. Loebel JP. Completed suicide in late life. *Psychiatr Serv*

2005;56:260–2.
26. Suominen K, Isometsa E, Suokas J, et al. Completed suicide after a suicide attempt: A 37-year follow up study. *Am J Psychiatry* 2004;161:563–4.
27. Goldstein RB, Black DW, Nasrallah A, Winokur G. The prediction of suicide: Sensitivity, specificity, and predictive value of a multivariate model applied to suicide among 1,906 patients with affective disorder. *Arch Gen Psychiatry* 1991;48:418–22.
28. Coryell W, Young AE. Clinical predictors of suicide in primary major depressive disorder. *J Clin Psychiatry* 2005;66:412–17.
29. Rudd MD, Berman AL, Joiner TE, etal. Warning signs for suicide: Theory, research, and clinical applications. *Suicide Life Threat Behav* 2006;36:255–62.
30. Minois G. *History of Suicide: Voluntary Death in Western Culture.* Translated by Lydia G. Cochrane. Baltimore, MD: The Johns Hopkins University Press, 1999:37–8, 302–28.
31. Harwood D, Hawton K, Hope T, Jacoby R. Suicide in older people without psychiatric disorder. *Int J Geriatr Psychiatry* 2006;21:363–7.
32. Jacobs DG. *Practice Guidelines for the Assessment and Treatment of Patients with Suicidal Behaviors.* Available at: www.psych.org/psych_pract/treatg/pg/pg_suicidalbehaviors.pdf. Access date: December 12, 2006.
33. Cooper J, Kapur N, Webb R, et al. Suicide after deliberate self-harm: A four-year cohort study. *Am J Psychiatry* 2005;162:297–303.
34. Shen X, Hackworth J, McCabe H, etal. Characteristics of suicide from 1998–2001 in a metropolitan area. *Death Studies* 2006;30:859–71.
35. Luoma JB, Martin CE, Pearson JL. Contact with mental health and primary care providers before suicide: A review of the evidence. *Am J Psychiatry* 2002;159:909–16.
36. Isometsa ET, Heikkinen ME, Marttunen MJ, et al. The last appointment before suicide: Is suicidal intent communicated? *Am J Psychiatry* 1995;152:919–22.
37. Fawcett J, Clark DC, Busch KA. Assessing and treating the patient at risk for suicide. *Psychiatr Ann* 1993;23:244–55.
38. Joiner TE, Walker RL, Rudd MD, Jobes DA. Scientizing and routinizing the assessment of suicidality in outpatient practice. *Prof Psychol Res Pr* 1999;30:447–53.
39. Harwood DMJ, Hawton K, Hope T, et al. Life problem and physical illness as a risk factor for suicide in older people: A descriptive and case control study. *Psychologic Med* 2006;36:1265–74.
40. The Air Force suicide prevention program AFPAM 44–160;April 2001.
41. Isacsson G, Rich CL. Antidepressant drug use and suicide prevention. *Int Rev Psychiatry* 2005;17:153–62.
42. Schneidman ES. Aphorisms of suicide and some implications for psychotherapy. *Am J Psychother* 1984;38:319–28.
43. Chemtob CM, Hamada RS, Bauer G, et al. Patient suicide: Frequency and impact on psychologists. *Prof Psychol Res Pr* 1988;19:416–20.
44. Chemtob CM, Hamada RS, Bauer G, et al. Patient suicide: Frequency and impact on psychiatrists. *Am J Psychiatry* 1988;145:224–8.
45. Alexander DA, Klein S, Gray NM, et al. Suicide by patients: Questionnaire study of its effect in consultant psychiatrists. *Br Med J* 2000;320:1571–4.
46. Menninger WW. Patient suicide and its impact on the psychotherapist. *Bull Menninger Clin* 1991;55:216–27.
47. Welton RS, Blackman LR. Suicide and the Air Force mental health provider: Frequency and impact. *Mil Med* 2006;171:844–8.
48. Litman RE. When patients commit suicide. *Am J Psychother* 1965;19:570–6.
49. Hendin H, Lipschitz A, Maltsberger JT, et al. Therapist's reactions to patient's suicides. *Am J Psychiatry* 2000;157:2022–7.
50. Paris J. Chronic suicidality among patients with borderline personality disorder. *Psychiatr Serv* 2002;53:738–42.